

**IN THE CLAIMS:**

1. **(Amended)** A dual communication channel remote telemetry system comprising:

at least one central controller configured to generate at least one control message and to receive at least one reporting message, said at least one central controller further configured to access a ~~broadcast communications channel~~ subscriber telephone line for carrying said control message and to access said subscriber telephone line ~~a shared two-way communications channel~~ for receiving said reporting message;

a plurality of remote telemetry units configured to measure at least one local parameter and to generate at least one reporting message, each of said plurality of remote telemetry units having a unique identifier and having a receiver configured to receive said control message over said ~~broadcast communications channel~~ subscriber telephone line and a transceiver configured for communicating said reporting message to said at least one central controller over said ~~shared two-way communications channel~~ subscriber telephone line.

2. **(Cancelled)**

3. **(Cancelled)**

4. **(Cancelled)**

5. **(Cancelled)**

6. **(Cancelled)**

7. (Amended) A dual communication channel remote telemetry system comprising: The dual communications channel remote telemetry system of claim 1

at least one central controller configured to generate at least one control message and to receive at least one reporting message, said at least one central controller further configured to access a broadcast communications channel for carrying said control message, and to access a shared two-way communications channel for receiving said reporting message;

a plurality of remote telemetry units configured to measure at least one local parameter and to generate at least one reporting message, each of said plurality of remote telemetry units having a unique identifier and having a receiver configured to receive said control message over said broadcast communications channel and a transceiver configured for communicating said reporting message to said at least one central controller over said shared two-way communications channel;

wherein said broadcast communications channel is a subscriber telephone line;  
and

wherein said subscriber telephone line further defines said shared two-way communications channel ~~is a subscriber telephone line~~, said transceiver associated with each of said remote telemetry units configured as an extension to said subscriber telephone line.

8. (Amended) A dual communication channel remote telemetry system comprising: The dual communications channel remote telemetry system of Claim 7

at least one central controller configured to generate at least one control message and to receive at least one reporting message, said at least one central controller further configured to access a broadcast communications channel for carrying said control message, and to access a shared two-way communications channel for receiving said reporting message;

a plurality of remote telemetry units configured to measure at least one local parameter and to generate at least one reporting message, each of said plurality of remote telemetry units having a unique identifier and having a receiver configured to receive said control message over said broadcast communications channel and a transceiver configured for communicating said reporting message to said at least one central controller over said shared two-way communications channel;

wherein said shared two-way communications channel is a subscriber telephone line, said subscriber telephone line further comprises comprising said broadcast communications channel, channel; and

wherein said transceiver associated with each of said remote telemetry units is configured with a shared telephone number as a subscriber party telephone line.

**9. (Original)** The dual communications channel remote telemetry system of Claim 8 wherein said control message comprises DTMF codes.

**10. (Cancelled)**

**11. (Cancelled)**

**12. (Amended)** The dual communications channel remote telemetry system of Claim 1 wherein simultaneous access to said ~~shared two-way communications~~

~~channel~~ subscriber telephone line is restricted to one of said transceivers associated with said remote telemetry units.

13. **(Amended)** The dual communications channel remote telemetry system of Claim 1 where media access control for said ~~shared two-way communications~~ ~~channel~~ subscriber telephone line is regulated by said central controller utilizing said control messages transmitted on said ~~broadcast communications channel~~ subscriber telephone line.

14. **(Amended)** The dual communications channel remote telemetry system of Claim 1 wherein said control message carried by said ~~broadcast communications~~ ~~channel~~ subscriber telephone line is received by each of said plurality of remote telemetry units.

15. **(Amended)** The dual communications channel remote telemetry system of Claim 14 wherein each of said plurality of remote telemetry units is configured to respond to said control message carried by said ~~broadcast communications channel~~ subscriber telephone line.

16. **(Amended)** The dual communications channel remote telemetry system of Claim 14 wherein said control message includes a remote telemetry recipient identifier, only said remote telemetry unit having said unique identifier matching said remote telemetry recipient identifier configured to respond to said control message carried by said ~~broadcast communications channel~~ subscriber telephone line.

17. **(Amended)** A method of remote telemetering in a dual communications pathway system in which at least one central controller having a subscriber telephone

line defining a broadcast communications pathway and a shared two-way communication pathway pathway, communicates with a plurality of remote telemetry units each having a unique identifier, said broadcast communications pathway carrying at least one control message and said shared two-way communications pathway carrying at least one reporting message, the method comprising the steps of:

generating, at said at least one central controller, a control message for transmission to said plurality of remote telemetry units, said control message including a recipient identifier associated with one of said plurality of remote telemetry units;

transmitting said control message from said at least one central controller over said broadcast communications pathway;

receiving, at each of said plurality of remote telemetry units, said control message;

comparing, at each of said plurality of remote telemetry units, said recipient identifier included in said control message with said unique identification code of said receiving remote telemetry unit; and

responsive to a match between said recipient identifier and said associated unique identification code, one of said plurality of remote telemetry units performing an operation instructed in said control message.

**18. (Original)** The method of remote telemetering in a dual communications pathway system of claim 17 further including the steps of:

responsive to said operation, establishing a communication link between said one of said plurality of remote telemetry units and said at least one central control over said shared two-way communications pathway;

transmitting at least one reporting message from said one of said plurality of remote telemetry units to said at least one central controller over said communication link; and

closing said communication link upon completion of said reporting message transmission to said at least one central controller.